

SYLLABUS

Academic year 2025 - 2026

1. Details about the program

1.1. Higher Education Institution	„Lucian Blaga” University of Sibiu
1.2. Faculty	Faculty of Sciences
1.3. Department	Environmental Sciences, Physics, Physical Education and Sports
1.4. Field of study	BIOLOGY
1.5. Study cycle ¹	BACHELOR
1.6. Specialization	BIOLOGY

2. Details about the course

2.1. Course name	SCIENTIFIC AND PROFESSIONAL WRITING AND COMMUNICATION			Code	FSTI.MFE.BIOEN.L.CA.3.1100.C-5.8		
2.2. Course coordinator	Assoc. Prof. Ana Maria Benedek-Sîrbu, PhD						
2.3. Practical activity coordinator	Assoc. Prof. Ana Maria Benedek-Sîrbu, PhD						
2.4. Year of study ²	2	2.5. Semester ³			3	2.6. Type of assessment ⁴	C
2.7. Type of discipline ⁵		A	2.8. Formative category of the discipline ⁶			C	

3. Estimated total time

3.1. Proportion of the discipline within the curriculum – number of hours / week					
3.1.a.Lecture	3.1.b. Seminar	3.1.c. Laboratory	3.1.d. Project	3.1.e Other	Total
1	-	1	-	-	2
3.2. Proportion of the discipline within the curriculum – number of hours / week					
3.2.a.Lecture	3.2.b. Seminar	3.2.c. Laboratory	3.2.d. Project	3.2.e Other	Total ⁷
14	-	14	-	-	28
Allocation of time budget for individual study⁸					No. hours
Study based on textbook, lecture notes, bibliography and course notes					20
Additional research: library, specialized electronic platforms and field or on-site investigation and documentation					30
Preparing for the seminar / laboratorires, home assignments, reports, portfolios and essays					40
Tutoring ⁹					4
Examinations ¹⁰					3
3.3. Total number of hours for individual study¹¹ (NOSI_{sem})					97
3.4. Total number of hours in the curriculum (NOAD_{sem})					28
3.5. Total number of hours per semester¹² (NOAD_{sem} + NOSI_{sem})					125
3.6. No of hours / ECTS					25
3.7. Number of credits¹³					5

4. Prerequisites (if applicable)

4.1. Prerequisite courses for enrollment to this subject (from the curriculum) ¹⁴	
4.2. Competencies	

5. Requirements (wherever applicable)

5.1. Lecture organization and structure ¹⁵	computer, videoprojector
5.2. Organization and structure of practical activities (lab/sem/pr/other) ¹⁶	access to Web of Science, Springer Link etc. databases

6. Learning outcomes ¹⁷

Number of credits assigned to the discipline: 5				
Learning outcomes				Credit allocation based on learning outcomes
No.	Knowledge	Aptitudes	Responsibility and autonomy	
LO 1	The student/graduate analyzes, evaluates, and utilizes concepts, theories, and methods from other fields in the field of Biology.	The student/graduate uses, investigates, and critically analyzes the principles of operation and use of equipment/instruments, techniques/working methods for investigating the functioning of biological systems.	The student/graduate operates scientific means of documentation, literature search, and critically evaluates scientific literature, creates arguments supported by scientific evidence, and clearly communicates that information in a variety of formats (models, tables, graphs, mathematical equations, etc., as appropriate).	3
LO 2	The student/graduate correctly uses and explains the specific terminology used in the field of Biology, the main concepts and laws, the characteristics of biological systems from the perspective of the principles of organization and functioning of living matter.	The student/graduate defines, describes, discusses/presents the major concepts in the field of Biology.	The student/graduate demonstrates responsibility and autonomy in the use of scientific knowledge in the field of Biology, by conducting research, developing or improving concepts, theories, operational methods, or biotechnological products, making ethical and professional decisions within the scientific process.	2

7. Course objectives (reflected by the framework of specific competencies)

7.1. General objective	Knowledge of the main types of scientific papers, of their form, structure and content
7.2. Specific objectives	Developing students' ability to design and write a scientific article, to make a specialized presentation and to write informative material for non-specialists

8. Course description

8.1. Lecture ¹⁸		Teaching methods ¹⁹	No. of hours
Lecture 1	Scientific papers – definition and types	Interactive lecture, explanation, conversation, problematisation	1
Lecture 2	Originality of scientific papers		1
Lecture 3	Documentation sources. Professional networks		2
Lecture 4	Compiling and citing bibliographies. Plagiarism		1
Lecture 5	Principles of academic writing		3
Lecture 6	Bachelor's theses, dissertations, doctoral theses		2
Lecture 7	Scientific articles. Scientific journals. Scientometric indices		1
Lecture 8	Research projects. Scientific reports		1
Lecture 9	Scientific communications		1
Lecture 10	Opening science to the general public. Developing works for popularization		1
		Total number of lecture hours:	14

8.2. Practical activities

8.2. Seminar		Teaching methods ²⁰	Hours
Seminar 1	Types of scientific papers - comparative analysis of content and structure	Interactive lecture with Power Point, explanation, conversation, problematisation, dialogue, brainstorming, case study, use of specialised software	1
Seminar 2	Original data - analysis of the scientific potential of different data sets		1
Seminar 3	Documentation sources - use of electronic databases		1
Seminar 4	Preparation and citation of the bibliography - use of specialized software		1
Seminar 5	Language and style of scientific papers - analysis of papers		1
Seminar 6	Bachelor's theses, dissertation, doctorate - comparative analysis		2
Seminar 7	Writing a scientific article based on a pre-existing data set		5
Seminar 8	Presentation of the results from the article in Power-Point format		1
Seminar 9	Transforming the scientific paper into an informative material for the general public		1
Total seminar hours			14

9. Bibliography

9.1. Recommended references	McMillan, V.E, 2016. Writing Papers in Biological Sciences. 6th edition. Bedford Publishing.
	Lertzman, K.P. 1995. Notes on writing papers and theses. Bulletin of the Ecological Society of America 76:86-90.
	Web of Science
9.2. Additional references	Knisely, K., 2013. A student Handbook for Writing in Biology. 5 th edition. W. H. Freeman Publishing

10. Correlating the course description with the expectations and requirements of representatives of the epistemic community, professional associations and significant employers and stakeholders related to the study program and the specific area²¹

The course content enables students to obtain skills of drawing up an original scientific paper and present the results in a Power Point presentation or a scientific report.

11. Evaluation

Type of activity	11.1 Assessment criteria	11.2 Assessment methods		11.3 Percentage of the final grade	Notes. ²²
11.4a Exam / Colloquium	• Theoretical and practical knowledge (quantity, correctness, accuracy)	Midterm / ongoing assignments ²³ :	10%	50%	
		Home assignments:	40%		
		Other activities ²⁴ :	%		
		Final assessment:	50%		
11.4b Seminar	• Knowledge of equipment, methods of using specific instruments and tools; assessment of tools or achievements, processing and interpretation of results	• Presentation of own work		50%	
11.5 Minimum performance standard ²⁵ - Taking part in the elaboration of the three projects. Knowledge of the main types of scientific papers, their content and structure.					

The course description includes components adapted to SEN (Special Educational Needs) persons, according to their type and degree, at all curricular elements and dimensions (competencies, objectives, course description, teaching methods, alternative assessment), in view of providing and ensuring equitable and fair opportunities to academic education for all students, with special attention to special educational needs.

Date of submission: 15 / 09 / 2025

Date of approval in the Department: 17 / 09 / 2025

	Degree, title, first name, surname	Signature
Course Teacher	Assoc. Prof. Ana-Maria Benedek-Sîrbu, PhD	
Study Program Coordinator	Assoc. Prof. Ana-Maria Benedek-Sîrbu, PhD	
Head of Department	Lecturer Ioan Tăușan, PhD	

¹ Licență / Master

² 1-4 pentru licență, 1-2 pentru master

³ 1-8 pentru licență, 1-3 pentru master

⁴ Examen, colocviu sau VP A/R – din planul de învățământ

⁵ Regim disciplină: O=Disciplină obligatorie; A=Disciplină opțională; U=Facultativă

⁶ Categoria formativă: S=Specialitate; F=Fundamentală; C=Complementară; I=Asistată integral; P=Asistată parțial; N=Neasistată

⁷ Este egal cu 14 săptămâni x numărul de ore de la punctul 3.1 (similar pentru 3.2.a.b.c.d.e.)

⁸ Liniile de mai jos se referă la studiul individual; totalul se completează la punctul 3.37.

⁹ Între 7 și 14 ore

¹⁰ Între 2 și 6 ore

¹¹ Suma valorilor de pe liniile anterioare, care se referă la studiul individual.

¹² Suma (3.5.) dintre numărul de ore de activitate didactică directă (NOAD) și numărul de ore de studiu individual (NOSI) trebuie să fie egală cu numărul de credite alocate disciplinei (punctul 3.7) x nr. ore pe credit (3.6.)

¹³ Numărul de credit se calculează după formula următoare și se rotunjește la valori vecine întregi (fie prin micșorare fie prin majorare)

$$\text{Nr. credite} = \frac{\text{NOCpSpD} \times C_C + \text{NOApSpD} \times C_A}{\text{TOCpSdP} \times C_C + \text{TOApSdP} \times C_A} \times 30 \text{ credite}$$

Unde:

- NOCpSpD = Număr ore curs/săptămână/disciplina pentru care se calculează creditele
- NOApSpD = Număr ore aplicații (sem./lab./pro.)/săptămână/disciplina pentru care se calculează creditele
- TOCpSdP = Număr total ore curs/săptămână din plan
- TOApSdP = Număr total ore aplicații (sem./lab./pro.)/săptămână din plan
- C_C/C_A = Coeficienți curs/aplicații calculate conform tabelului

Coeficienți	Curs	Aplicații (S/L/P)
Licență	2	1
Master	2,5	1,5
Licență lb. străină	2,5	1,25

¹⁴ Se menționează disciplinele obligatoriu a fi promovate anterior sau echivalente

¹⁵ Tablă, videoproiector, flipchart, materiale didactice specifice, platforme on-line etc.

¹⁶ Tehnică de calcul, pachete software, standuri experimentale, platforme on-line etc.

¹⁷ The learning outcomes will be stated in accordance with the specific standards of the ARACIS expert commissions (<https://www.aracis.ro/ghiduri/>)

¹⁸ Titluri de capitole și paragrafe

¹⁹ Expunere, prelegere, prezentare la tablă a problematicei studiate, utilizare videoproiector, discuții cu studenții (pentru fiecare capitol, dacă este cazul)

²⁰ Discussions, debates, presentations and/or analyses of papers, solving exercises and problems

²¹ Legătura cu alte discipline, utilitatea disciplinei pe piața muncii

²² CPE – condiționează participarea la examen; nCPE – nu condiționează participarea la examen; CEF - condiționează evaluarea finală; N/A – nu se aplică

²³ Se va preciza numărul de teste și săptămânile în care vor fi susținute.

²⁴ Cercuri științifice, concursuri profesionale etc.

²⁵ Se particularizează la specificul disciplinei standardul minim de performanță din grila de competențe a programului de studii, dacă este cazul.